

## REMARKS

Claims 1-23 were examined and reported in the Office Action. Claims 1-23 are rejected. Claims 1-23 remain.

Applicant requests reconsideration of the application in view of the following remarks.

### I. 35 U.S.C. § 103

A. It is asserted in the Office Action that claims 1-7 and 9-23 are rejected in the Office Action under 35 U.S.C. § 103(a), as being unpatentable over U. S. Patent No. 5,432,838 issued to Purchase et al. ("Purchase") in view of U.S. Patent Application No. 5,697,067 issued to Graham et al. ("Graham"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2142 "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." (*In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Further, according to MPEP §2143.03, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974))." "*All words in a claim must be considered* in judging the patentability of that claim against the prior art." (*In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), emphasis added.)

Applicant's claim 1 contains the limitations of "[a] radio frequency communication system for communicating radio frequency data signals containing data to and from remotely located data devices, said system comprising: a radiating

transmission line; a head end unit comprising a system server, said head end unit being coupled to a first end of the radiating transmission line; at least one regeneration amplifier connected to said transmission line for amplifying the data signals by demodulating the data signals to recover the data contained therein and modulating the recovered data into a regenerated radio frequency data signal containing the recovered data; wherein the regenerated data signal is transmitted through the radiating transmission line at a power level permitting transmission and radiation of the regenerated radio frequency data signal to the remotely located data devices within a coverage area of the regeneration amplifier."

Applicant's claim 11 contains the limitations of "[i]n a radio frequency communication system for communicating radio frequency data signals containing data to and from remotely located data devices through a radiating transmission line, a regeneration amplifier for amplifying the digital signals through the radiating transmission line, said regeneration amplifier comprising: a demodulator for demodulating the data signals to recover the data contained therein; a modulator for modulating the recovered data into a regenerated radio frequency data signal containing the recovered data; an amplifier for amplifying the regenerated data signal for transmission through the radiating transmission line at a power level permitting transmission and radiation of the regenerated radio frequency data signal to the remotely located data devices within a coverage area of the regeneration amplifier."

Purchase discloses a communication system suited for an underground mine. Applicant notes that a principle aspect of Applicant's claimed invention is that the radio frequency communication system has "at least one regeneration amplifier connected to said transmission line for amplifying the data signals by demodulating data signals to recover the data contained therein and modulating the recovered data into a generated radio frequency data signal containing the recovered data." In the Office Action it is asserted that Purchase is relied on as disclosing Applicant's aforementioned limitation (Office Action, pages 2-3). In particular, the Office Action relies on the fact that Purchase discloses modems, such as modem 82, which modulate and demodulate broadband data signals from network 12. Purchase, however, only discloses modems at the head end or at terminal equipment. Purchase does not teach, disclose or suggest

that the demodulation and modulation is in order to amplify the data signals that occur along the transmission line at periodic locations. (See Applicant's claim 1).

Accordingly, Purchase does not teach, disclose or suggest having the modulation and demodulation occur at periodic locations along the transmission line in order to amplify the signal.

Graham discloses a radio frequency communication system using radiating or "leaky" transmission lines. Applicant notes that Graham is assigned to Applicant and Applicant is very familiar with the teachings of Graham. In the Office Action it is asserted that Graham is relied on to disclose that the data signals are transmitted through the radiating transmission line at a power level permitting transmission and radiation of the regenerated radio frequency data signals. Note, however, that Graham only discloses using amplifiers, such as linear amplifiers, shown for instance in Figure 2. Graham does not teach, disclose or suggest demodulating the data signals and then modulating the recovered data into a regenerated radio frequency data signal.

Neither Purchase, Graham, nor the combination of the two, teach, disclose or suggest all the limitations contained in Applicant's claims 1 and 11, as listed above. Since neither Purchase, Graham, nor the combination of the two, teach, disclose or suggest all the limitations of Applicant's claims 1 and 11, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's claims 1 and 11 are not obvious over Purchase in view of Graham since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claims that directly or indirectly depend from claims 1 and 11, namely claims 2-7 and 9-10, and 12-23, respectively, would also not be obvious over Purchase in view of Graham for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejections for claims 1-7 and 9-23 are respectfully requested.

**B.** It is asserted in the Office Action that claim 8 is rejected in the Office Action under 35 U.S.C. § 103(a), as being unpatentable over Purchase in view of Graham in

further view of U. S. Patent No. 6,621,812 issued to Chapman et al. ("Chapman").

Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant's claim 8 indirectly depends on claim 1. Applicant has addressed claim 1 regarding Purchase in view of Graham above in section I(A).

Chapman discloses a communication system for real-time communication over a packet-switched data network and for mapping voice activation detection to a scheduled access media. Chapman, however, does not teach, disclose or suggest Applicant's claim limitations of "at least one regeneration amplifier connected to said transmission line for amplifying the data signals by demodulating data signals to recover the data contained therein and modulating the recovered data into a generated radio frequency data signal containing the recovered data."

Therefore, neither Purchase, Graham, Chapman, nor the combination of the three, teach, disclose or suggest all the limitations contained in Applicant's claim 1, as listed above. Since neither Purchase, Graham, Chapman, nor the combination of the three, teach, disclose or suggest all the limitations of Applicant's claim 1, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's claim 1 is not obvious over Purchase in view of Graham, and further in view of Chapman since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claim that indirectly depends from claim 1, namely claim 8, would also not be obvious over Purchase in view of Graham, and further in view of Chapman for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection for claim 8 is respectfully requested.

**CONCLUSION**

In view of the foregoing, it is submitted that claims 1-23 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

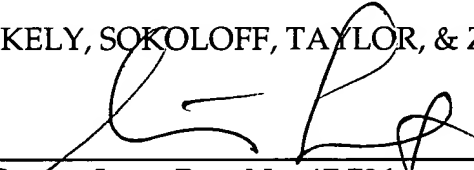
**PETITION FOR EXTENSION OF TIME**

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on March 26, 2004, Applicant respectfully petitions the Commissioner for a three (3) month extension of time, extending the period for response to Monday September 27, 2004 (September 26, 2004 being a Sunday). The Commissioner is hereby authorized to charge payment to Deposit Account No. 02-2666 in the amount of \$475.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(3) small entity. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: September 24, 2004

By:   
Steven Laut, Reg. No. 47,736

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025  
(310) 207-3800

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on September 24, 2004.

  
Jean Svoboda